

Gulf of Mexico Harmful Algal Bloom Bulletin

26 December 2007

NOAA Ocean Service

NOAA Satellites and Information Service

Last bulletin: December 26, 2007

Conditions Report

NE Florida: A harmful algal bloom has been identified from southern Volusia to northern St. Lucie County. In southern Volusia County, patchy high impacts are possible today through Friday and patchy low impacts are possible Saturday and Sunday. In southern Brevard County, patchy moderate impacts are possible today through Friday and patchy very low impacts are possible on Saturday and Sunday. In northern Brevard County, patchy low impacts are possible today through Saturday and patchy very low impacts are possible on Sunday. In northern Indian River County, patchy low impacts are possible today through Friday and patchy very low impacts are possible on Saturday and Sunday. In southern Indian River County, patchy very low impacts are possible today through Sunday. In northern St. Lucie County, patchy low impacts are possible today through Sunday. No impacts are expected elsewhere along northeast Florida.

SW Florida: There is no indication of a harmful algal bloom at the coast in southwest Florida. No impacts are expected today through Sunday, December 30.

Analysis

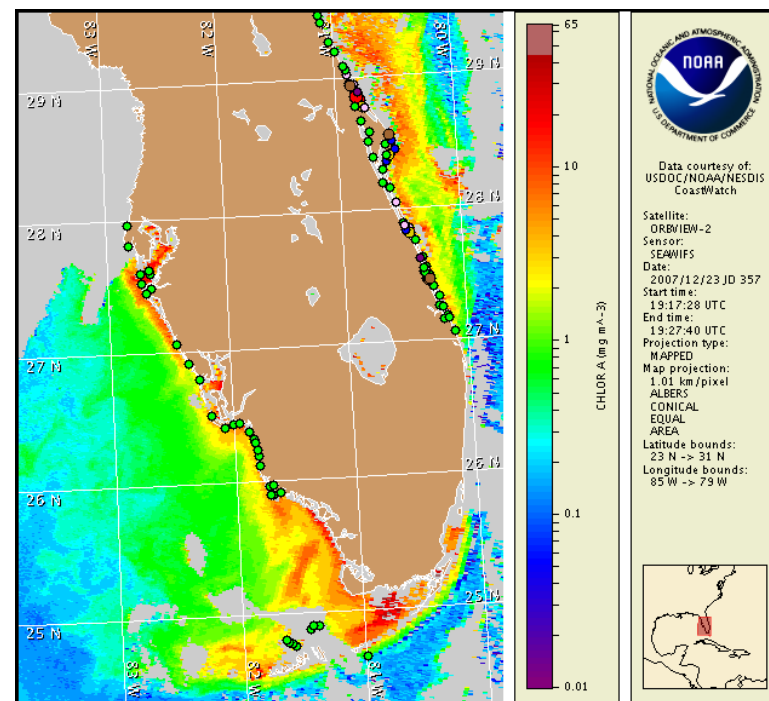
NE Florida: The harmful algal bloom persists between southern Volusia and northern St. Lucie County. In Brevard County, medium concentrations of *K. brevis* have been found at Melbourne Beach, and in northern St. Lucie County sample results indicate 'low a' concentrations of *K. brevis* (FWRI; 12/19). Also, sampling indicates that *K. brevis* is not present in southern St. Lucie and Martin Counties (FWRI; 12/19). Satellite imagery (12/23) is cloudy at the coast; however elevated chlorophyll levels ($>3 \mu\text{g/L}$) are visible from far offshore (18 mi away) northern Volusia County to southern Indian River County. A small region of high chlorophyll ($>10 \mu\text{g/L}$) is visible approximately 30-40 mi offshore of Brevard County (near $28^{\circ}10'23''\text{N}$ $80^{\circ}2'20''\text{W}$). Sampling is highly recommended. Reports of respiratory irritation have been received from Brevard and Volusia Counties (FWRI; 12/21) and reports of dead fish have been received from Brevard County (FWRI; 12/22-25). Onshore winds today through Friday (through Saturday in northern Brevard County) may increase the potential for impacts at the coast. Intensification of the bloom is unlikely.

**** Please refer to the previous South Florida Bulletin (2007-093) for analysis and information on southwest Florida and the Florida Keys.**

Please note the following restrictions on all SeaWiFS imagery derived from CoastWatch.

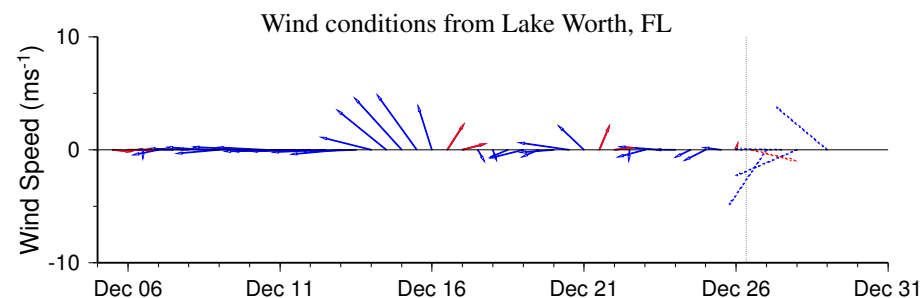
1. Data are restricted to civil marine applications only; i.e. federal, state, and local government use/distribution is permitted.
2. Image products may be published in newspapers. Any other publishing arrangements must receive GeoEye approval via the CoastWatch Program.

**** An updated conditions report for southwest Florida will be issued on Friday, December 28.** Urizar, Fisher



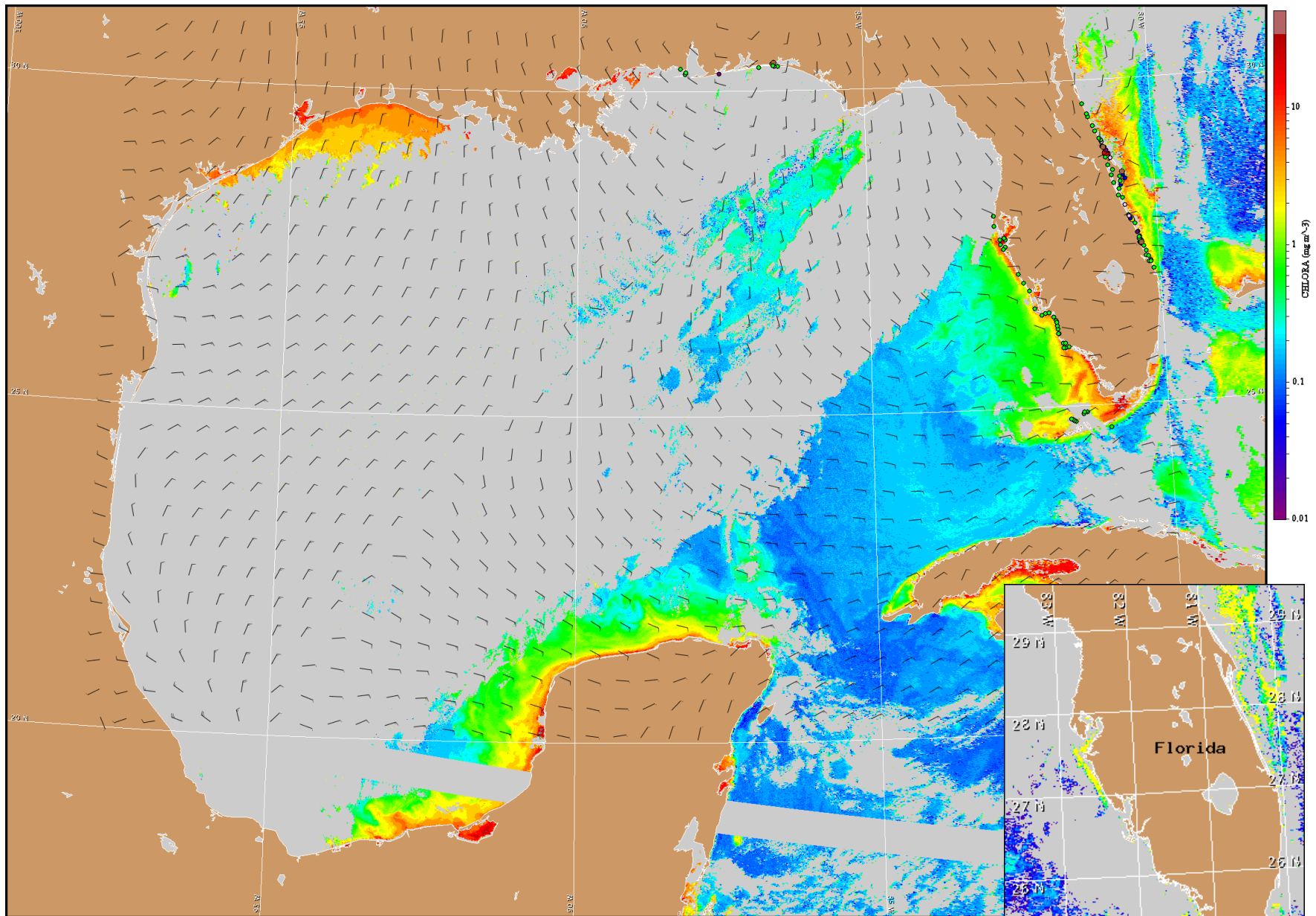
Satellite chlorophyll image with possible HAB areas shown by red polygon(s). Cell concentration sampling data from December 17 to 20 shown as red (high), orange (medium), yellow (low b), brown (low a), blue (very low b), purple (very low a), pink (present), and green (not present). For a list of cell count data providers and a key to the cell concentration categories, please see the HABFS bulletin guide:

http://www.csc.noaa.gov/crs/habf/habfs_bulletin_guide.pdf



Wind speed and direction are averaged over 12 hours from buoy measurements. Length of line indicates speed; angle indicates direction. Red indicates that the wind direction favors upwelling near the coast. Values to the left of the dotted vertical line are measured values; values to the right are forecasts.

NE Florida: Northerlies today (10 kt, 5 m/s) and northeasterlies tonight (5-10 kt, 3-5 m/s). Southeasterlies Thursday and Friday (5-15 kt, 3-8 m/s). Southerlies Saturday (5-10 kt, 3-5 m/s). Southwesterlies Sunday (5-10 kt).



Satellite chlorophyll image and forecast winds for December 27, 2007 12Z with Cell concentration sampling data from December 17 to 20 shown as red (high), orange (medium), yellow (low b), brown (low a), blue(very low b), purple (very low a), pink (present), and green (not present). For a list of cell count data providers and a key to the cell concentration categories, please see the HABFS bulletin guide: http://www.csc.noaa.gov/crs/habf/habfs_bulletin_guide.pdf

Verified and suspected HAB areas shown in red. Other areas of high chlorophyll concentration shown in yellow (see p. 1 analysis for interpretation).

Wind conditions from St Augustine, FL

